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Evaluation of the Ontario High School Driver Education Delivery System –

Summary Report

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EXECUTIVE SUMMARY

Public high school driver education in Ontario is a huge (60,000 students) and diverse (77 school boards) undertaking. It is paid for by Ontario taxpayers, local ratepayers, and driver education students. Because of the discrepancy between the sheer size of the program and the minimal allocation of staff that the Ministries allot to it (the Ministry of Transportation and Communications has one staff person acting as program administrator; the Ministry of Education allocates even less time to the program) many details of the program's structure and operation (which vary with different school boards) are not generally known. The program needs to be described and evaluated. The project presented in this report was aimed at discovering the major ways in which the program was organized and taught in different school boards, and at evaluating several examples of program delivery. This project has met its objectives in (1) developing instruments for getting both descriptive and judgemental data from program participants; (2) identifying some of the major points of difference in the program as it is actualized in different school boards, and (3) describing such differences and assessing quality in a small sample of participating school boards. Now that this project has been completed, now that data-collection methods have been developed and basic knowledge about dimensions of program differences has been obtained, the means are available for assessing differences in the program delivery system across Ontario. A second part of the study was intended for this purpose; this second part of the delivery system evaluation should now be carried out.

Our data and findings highlight three major issues.

1. In many school boards, coordination of the program is minimal and sometimes clearly inadequate. Coordination varies from situations in which individual schools run their own program, from the hiring of teaching personnel to the granting of graduation certificates, to situations in which a full-time coordinator organizes and administers at close range, the board's complete program.

Examples of excellent coordination can be found in some boards. One of the peculiar facts about Ontario high school driver education is that many driver educators in other boards have not heard about these fine examples. The successful, well-run programs need to become better known, if only as possible models for less well-organized and well-staffed boards to consider.

2. There are three common strategies for in-car instruction; most boards use one or a mixture of these strategies. Probably the oldest strategy historically is to have the same teachers who teach the classroom part, teach the in-car part. This approach is less widely used today, and is very seldom used in the largest school boards. The second strategy is for the school board to hire licensed driving instructors from the commercial sector, as part or full-time employees of the board--an alternative that still maintains the school board's direct control, responsibility and supervision of in-car teaching. To a large and growing extent, however, school boards (partly because of a shortage of well-qualified in-car instructors, partly because of costs, and partly perhaps because it frees them from administrative work) are contracting with commercial driving schools to do the in-car part. Although this can work out well, especially if the board is willing and financially able to choose the winning contract tender on the basis of quality and not solely on cost, it is evident that in some of the large cities and boroughs of Ontario, cut-rate driving schools are teaching high school students using low-paid instructors who include in their numbers individuals who do not speak English well, do not give students their rightful time behind the wheel for which they have paid, or fail to bring students to a reasonable level of safe-driving competence within the 6 hours minimally allotted for in-car instruction. These facts have been known among driver educators for some time; the need for adequate screening and improving the quality of commercial driving instructors was the subject of a recommendation of a select committee of the Legislature (Select Committee, 1977). This problem still existed at the time of data collection. However, as of June 1981 all commercial instructors must pass a four week course as a requirement for licensing.

3. The third issue has to do with the classroom-instruction part of the program delivery system. We actually received more complaints about the classroom period, subject matter, and quality of teaching than we did about in-car instruction. Although this is no doubt partly due to the fact that high school students are highly experienced (and therefore more critical) recipients of classroom instruction, but babes in the woods when it comes to driving instruction, their criticisms were often cogent.

One of the most important reasons why students enroll in the course, according to responses of our sample of graduates, is because a program graduation certificate (along with a drivers licence) entitles young people (or their parents whose car they drive) to a reduced car insurance rate. If the insurance reduction were discontinued (and the Insurance Advisory Bureau has announced that it may be, since insurance claims are reportedly the same for drivers with or without a driver education certificate) enrollments would probably drop. As long as the reduced insurance is in effect, high school driver education is a "seller's market" and some teachers and some boards make less than sufficient effort to deliver quality instruction. This is evident in the case of certain boards, mainly in large cities and metropolitan regions, in the form of cut-rate in-car instruction, poorly prepared and poorly presented classes, and lack of coordination and supervision by school board officials.

These conclusions are supported in this report by questionnaire data obtained from board-level coordinators, driver education supervisors, classroom teachers, and recent program graduates. They have been verified in focus-group meetings with teachers and with in-car instructors, and in conversations with driver education supervisors and with owners of driving schools. The questionnaires have also addressed, in considerable detail, the structure, content, methods and procedures used in high school driver education in a representative group of 12 school boards. This report gives a somewhat thoroughgoing picture of how driver education is being delivered in these boards. It remains to chart the extent and variations of our findings on a

larger, province-wide scale. The second part of the study that was originally envisaged is now called for. This second part should focus on selected dimensions and issues characterized in the present report, and should assess such issues quantitatively across the province. Such a study is needed to support well-considered and effective action by the Ontario Ministry of Transportation and Communications.

This report is a summary of the major findings of the evaluation of the Ontario high school driver education delivery system. Complete data and details of analysis can be found in the complete 266 page report located in the Ministry of Transportation and Communications' library.

1. INTRODUCTION

There are several reasons for this study. The Ontario Ministry of Transportation and Communications intends to develop a new or revised high school driver education course. Given this intention, it is important to know and understand how the presently existing course is being conducted and delivered. Thus it will be important to know what "the existing course" is, in terms of the processes and activities involved in it, and not just in terms of its outcomes. It will be shown in this report that the existing course is variable from one school board to another. Quite aside from the question of the success of the existing course in producing measurable outcomes on (for example) driving knowledge, driving skill, or attitudes, there is the whole question of whether the existing structures by which high school driver education operates are workable, or viable for the future. We shall raise the question whether some of these structures are even acceptable, and whether this publicly funded program is meeting everyday educational and community standards.

A brief introduction to the general nature of the program and its organizational structure is needed at this point.

Almost all public school boards in Ontario offer extra-curricular, non-credit driver education for high school students. The curriculum is set and the textbook is produced and supplied by the Ontario Ministry of Transportation and Communication (MTC). Financing is partly by the Ministry of Education and partly by the local board. A grant is available to the local board from the Ministry of Education equivalent to a continuing education grant for the classroom part of the program. The local board must finance the in-car part. This is done, in almost every case, through a fee set and collected by the local board (the fee varies among different boards). In some cases the board finds it necessary or desirable to augment the funding using board revenue from local school taxes. Students in the public school system become eligible to take the course on their 16th birthday. The classroom part, by MTC/MOE regulation, consists of a minimum of 25 hours of classroom instruction. In-car training is for a minimum of six hours of behind-the-wheel driving instruction. (Six hours applies to a car with automatic transmission, 8 hours for a standard transmission. Some boards provide more than 6 hours.) Also, a minimum 12 hours of in-car observation is required for each student. Teachers, both in-class and in-car, must be graduates of a recognized course in school driver instruction. Classroom teachers are required also to have a valid Ontario Teaching Certificate. In-car instructors must be licensed by MTC. Cars used for instruction must be equipped with dual controls and covered by insurance. Cars for driving instruction used to be supplied on loan by car dealers, in nearly all cases, but at present many if not most dealers charge car rental fees. Also, many in-car instructors use their own cars, for which the board must also pay rental and service charges. Some boards own cars that are used for driver education.

Many if not most classroom teachers are regularly employed as teachers in the local board's secondary schools, often in the same school where they teach driver education. Other sources of classroom teachers include elementary school teachers, teachers from other boards, and (as a small group) qualified teachers of driver education who lack an Ontario teaching

certificate and work on a letter of permission from M.of Ed*. There is a general shortage of qualified classroom teachers who are willing to teach driver education; numerous other teachers are qualified but have chosen not to continue teaching driver education. Reasons include increased salaries for regular school teaching, inadequate increases in driver education pay and unattractive teaching conditions.

In-car instruction is carried out by four general types of instructor. A small but important group (formerly much larger) are teachers with Ontario certificates, often teachers or former teachers with the local board. Much larger in numbers, among in-car instructors, are employees of commercial driving schools under contract to local boards to provide in-car instruction in the boards' driver education program. The third and fourth categories are in-car instructors employed directly by the board (for varying percentages of their time), on a monthly salary or hourly paid. Some if not all of the hourly paid instructors are themselves owners or employees of driving schools. The nature, and perhaps the quality of in-car instruction is likely to depend to some extent on the type or types of in-car instructor working for the board or for a driving school under contract to the board.

Time-slotting of classroom and in-car instruction varies somewhat. Most schools hold classes either in the late afternoon or evening. In-car lessons are also given in these periods, but may equally be given on weekends, noon hours, in the morning before school, or even in the students' spare periods -- the only limitation being that courses "must not reduce, or interfere with, the time allotted to regular subjects in the curriculum" (Ministry of Education, Ontario, Resource Guide, 1977).

On completion of the course the student is given a certificate issued by the MTC. Driver education teachers are empowered to withold a driving certificate if in their opinion a student has not met the desired standards.

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*MTC used to grant these letters of permission, but this practise is now strongly discouraged.

What has been said above about the different categories of in-car instructors is often connected with the amount of investment of time, money and active interest that the school board, schools and community put into driver education. A few boards have a full-time driver education coordinator or head, a classroom equipped specifically for teaching the subject, driving simulators, and an off-street driving range. Clearly, these involve considerable capital and ongoing expenditures by the local board. Such boards may also employ monthly-salaried driving instructors who are sometimes called para-professionals. At the opposite extreme are boards that (1) have relatively little capital investment in driver education and little interest among principals in the schools; (2) assign the task of coordinating the driver education program to a board-level staff member whose major duties are in some other area; (3) typically have difficulty in staffing and supervising the in-car phase of the program. Such boards often address the problem of arranging for in-car instruction by contracting it to the commercial driving school that submits the lowest tender. In between these two extremes are the majority of Ontario boards. Some of these select and hire individual in-car instructors on an hourly paid basis. This approach may be dictated by the lack of a large enough driving school in the district to handle the size of the board's program. From this very general, imprecise outline, the reader may form some suppositions about the different ways driver education may work, and about possible effects on program quality. It is these areas that this project addressed.

This study includes characterization of program participants - administrators, teachers and students; description of program structures, resources, and objectives; assessment of how the program operates (at all levels) in relation to the Ministry's intents as to how it should operate; conceptual analysis and interpretation of findings; evaluation, consisting of value judgments made with reference to suitably selected standards of value; and recommendations for action.

We have paid particular attention to selecting a sample of school boards that will exemplify several different ways of structuring, organizing and staffing the program at the school board level. We believe that some of these structurings are qualitatively better than others, and we will explain why. We wish to take the reader through a process of description, comparison, and value judgement that will reveal not only "facts", interpretations, and judgements, but the particular standards we adopt in judging value. In this way we hope to provide the reader with the means for making his or her own judgements of whether our reasoning and valuing are rational and convincing.

Our methods of data collection have included both mail questionnaires and "qualitative" techniques such as (1) collecting documents from programs in local boards; (2) interviewing informants; (3) organizing meetings of teachers/instructors in a board for the purpose of recording the resulting discussion as qualitative data.

Our concept of objectivity centres not on closely specified procedures (although in the case of the questionnaires that we used, most but not all responses were limited to a set of specified alternatives to permit numerical representation and statistical analysis) but on confirmation of findings, i.e. agreement among a variety of information sources.

2. METHODOLOGY

The data collection activity can be characterized as a process of moving from the general to the particular. We began by asking public school boards in Ontario for some general information about their driver education program. In succeeding steps, our questions became more focused on particulars, as to both factual and attitudinal information. Our questions were directed toward a sample of those who could provide this more detailed information, namely: supervisors and teachers at the group-of-schools level and the individual school level; and recent graduates of the program. We compared the information, understandings, and opinions expressed by these groups.

The first questionnaire (Administrator's Questionnaire A) was sent to all public school boards in Ontario*. Subsequent questionnaires and other data-gathering by mail and by telephone were focused on samples of a population of 65 responding school boards. Sampling was done at two levels.

1) Of the 65 responding school boards, 12 boards were selected for closer study. The selection of this sample of 12 is described in detail later in this report.

2) Of the 12 boards, 4 were selected for closer study including visits, interviews with the board's driver education coordinator, and focus-group discussions with small groups of classroom teachers and in-car instructors. These samplings and activities are described in more detail later in this report.

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* There are 80 public school boards in Ontario; at this stage of the project we had learned that 3 of them were not offering driver education.

The 5 questionnaires (all of which were administered by mail) and their contents were as follows:

Administrators' Questionnaire A
(to all boards)

Partial outline of contents:
-role of board administrator of driver education
-size of program
-numbers and categories of classroom teachers and in-car instructors
-driving school contracts for in-car instruction

Administrators' Questionnaire B
(to 12 boards)

Partial outline of contents:
-supervisory roles and activities
-training and experience of respondent with regard to driver education
-communication and coordination among classroom teachers and in-car instructors
-reliance on Teacher's Guide
-number of students
-pass/fail decisions
-rating of quality, satisfaction, and difficulties concerning various aspects of the program
-problems with contracted driving schools
-attitude toward driver education as a possible high school credit subject
-instructional objectives of driver eduation

Area Supervisor's Questionnaire (ASQ)
(to 3 of the 12 boards)*

High School Supervisor's Questionnaire (HSSQ)
(to all driver education high schools in the remaining 9 boards, none of which had area supervisors)

N.B. HSSQ was mailed to the high school principals who in most cases passed it on to a driver education classroom teacher.

Partial outline of contents: (ASQ and HSSQ had similar contents organized differently)
-roles and responsibilities of respondent
-education and experience
-size of program
-numbers and types of driver education classroom teachers
-numbers and types of driver education in-car instructors
-contact with in-car instructors

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* Including 2 boards that had area supervisors, plus one board which required the Area Supervisor's questionnaire for reasons of administrative structure.

- supervision of in-car instructors
- role of school principal
- parent/student complaints
- attitude to driver education as a possible credit subject
- classroom and in-car resources
- classroom and in-car schedules
- textbooks in use
- classroom/in-car coordination
- in-car reports
- ratings of quality, satisfaction and difficulties concerning various aspects of the program
- problems with contracted driving schools
- teaching and evaluation of student safe-driving attitudes
- instructional objectives of driving education

Graduate's Questionnaire
(to 399 program graduates in 11 boards)*

Partial outline of contents:
- demographics
- driver education course status
- school status
- academic aspirations
- classroom instruction received
- in-car instruction received
- licence status - including demerits if any
- current amount of driving
- ability to operate car and other vehicles before obtaining driving permit
- reasons for enrolling
- attitude to driver education as a possible credit course
- agree/disagree questions on aspects of: classroom instruction (including teacher), in-car instruction (including instructor), time required, effectiveness of the course
- course fee
- amount of off-street practice in the course
- post-course help with driving
- attitudes to: aspects of the classroom part and aspects of the in-car part

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* Graduates' questionnaires were sent to graduates in only 11 of the 12 boards because lists of graduates in one board were not available.

2.1 Sampling

The sample of 12 boards from the population of 65 responding school boards was selected according to the following sampling criteria.

1. All 12 boards had responded to Administrator's Questionnaire A.

2. All 12 boards had annual driver education enrolments of 500 or more (the number of boards that were thereby excluded, i.e. those having less than 500 driver education students per year, constituted approximately 15% of the total annual driver education enrolment across Ontario). (Approximately 30 boards had driver education enrolments under 500. The exact number is not available due to incomplete data.)

3. Selection of the 12 boards was based in part on two criteria: strength and activeness of program coordination at the board level, and type of in-car instructors. We used these two criteria because we knew that much dissatisfaction had arisen from the performance of contracted commercial driving schools in some boards, and we believed that strength of board-level coordination would have much to do with the quality of the courses as delivered and taught. The types of in-car instructors represented by different boards in the sample included:

- in-car instructors who were also driver education classroom teachers
- in-car instructors employed as such by the board (called para-professionals in some boards)
- in-car instructors who were employees of a commercial driving school which was under contract to provide in-car instruction to the board

4. Selection of the 12 boards was also carried out so as to ensure representation of each of the following types of board or board program:

- urban/semi-urban/rural
- program size (representing four size ranges: 500-999, 1000 - 1499, 1500-1999, 2000 and over)

- coordination type:
  - full-time driver education coordinator
  - part-time driver education coordinator experienced in teaching driver education, having specific responsibilities assigned by the board
  - part-time driver education area supervisors experienced in teaching driver education, working under a coordinator of continuing education
  - part-time area supervisors of continuing education inexperienced in driver education, working under a coordinator of continuing education
  - board officer administrating driver education as a minor responsibility

- type of classroom teachers:
  - employed directly by the board
  - employed by a commercial driving school contracted to provide in-class and in-car instruction to the board
  - certificated teachers, of whom some were driver education-qualified, while others taught under permission of M. of Ed. or the local board
  - classroom instructors who were not certificated teachers, and who taught under permission of M. of Ed. or the local board

By selecting the 12 boards in this way we hoped to ensure that the sample would represent the numerous ways in which high school driver education is organized and staffed in Ontario.

2.2 Other Data-Collection & Research Activities

In addition to designing, developing, administering and analyzing results from the questionnaires outlined above, we engaged in the following other research activities.

a) We made numerous checks and clarifications of questionnaire responses, especially in the case of responses to Administrator's Questionnaires A and B from the 12 sample boards, but also in the case of the other questionnaires. This checking and clarifying was done mainly by telephone follow-up with the respondent.

b) We conferred frequently and at length, with experts on Ontario Driver Education both inside and outside the Ministry.* In these conferences we sought both information on the program and reactions to our project plans as they developed.

c) We visited driver education programs in 4 school boards. We interviewed personnel and students and observed in-car instruction in one of these boards. We conducted focus-group discussions in two of these boards, recording and organizing the discussion data.

d) In addition to focus-group discussions comprising driver education classroom teachers in two of these boards, we organized and held focus-group discussions of in-car instructors employed by contracted commercial driving schools, in two of these boards.

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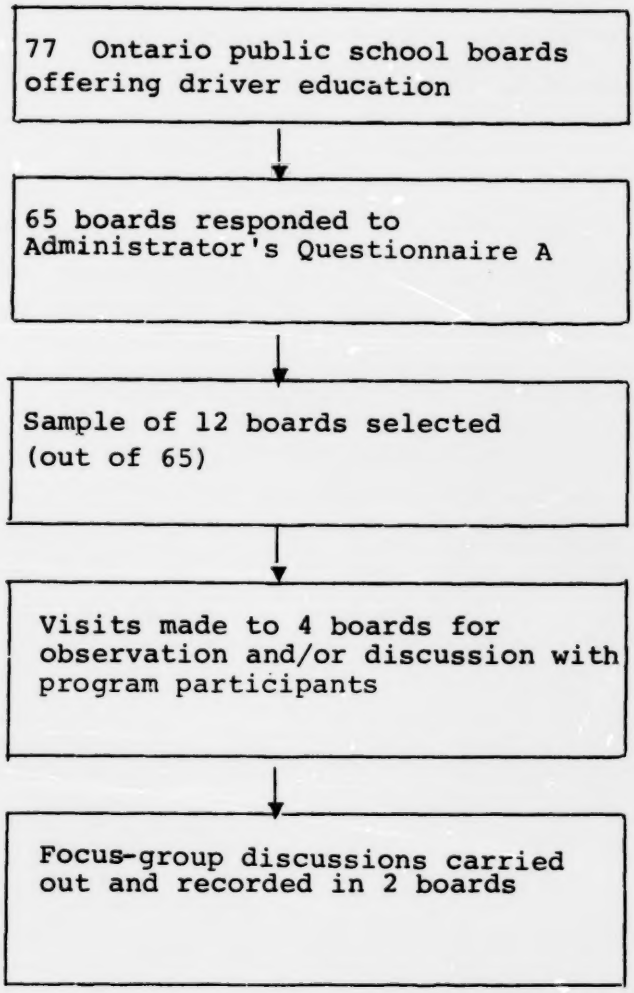
* From this point on, "Ministry" or "MTC" will refer to the Ministry of Transportation and Communications. References to the Ministry of Education will be spelled out explicitly.

DESIGN OF DATA COLLECTION ACTIVITIES

A. Sampling


77 Ontario public school boards offering driver education
65 boards responded to Administrator's Questionnaire A
Sample of 12 boards selected (out of 65)
Visits made to 4 boards for observation and/or discussion with program participants
Focus-group discussions carried out and recorded in 2 boards

B. Survey instruments developed and used

1. Administrator's Questionnaire to 77 boards

2. Administrator's Questionnaire B to 12 boards

3A. 9 Area Supervisor's Questionnaires (ASQs) to 3 boards

3B. 96 High School Supervisor's Questionnaires (HSSQs) to schools in 9 boards

4. Graduate's Questionnaires to 399 recent program graduates in 11 boards (names were not available for the 12th board in the sample)

C. In addition, much information both of a preliminary nature and follow-up was collected by telephone.

3. SUMMARY OF MAJOR FINDINGS

3.1 Contrary to the Minister's memorandum of 5 November, 1980, principals in many schools take no responsibility for the driver education that is taught in their schools. Also contrary to the memorandum, many driver education classroom teachers have little or even nothing to do with in-car instruction, its quality or coordination. The last statement does not refer to those school boards in which there is a school board coordinator or supervisor who supervises in-car instruction in an active and ongoing way, thus relieving classroom teachers of the responsibility assigned to them in the memorandum. The fact is that many driver education students are being taught by in-car instructors who receive no supervision or coordination from anyone representing the school boards that collect fees from these students.

3.2 Many classroom teachers have never taught in-car.* In such cases it is perhaps not reasonable to demand (as the Minister's memorandum seems to demand) that the classroom teacher who has no in-car teaching experience be responsible for the quality of in-car instruction. Moreover, a considerable number of classroom teachers (no exact figures could be obtained) although possessing Ontario teaching certificates, have no officially approved training in either classroom or in-car instruction. The reason for this situation that is given by their driver education coordinators is that these teachers will not or cannot attend training courses offered in distant centres and the Ministry of Education will not or has not been able to offer training courses in their districts.

3.3 A considerable number of experienced driver education classroom teachers have given up driver education. There are 3 main reasons: their regular teaching salaries have increased; pay for driver education teaching has not kept up with inflation; and teaching conditions are objectionable (time of day, class sizes, and lack of motivation of students in the classroom part.)

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* The majority of classroom teachers will however, have had training in in-car instruction.

The difficulty in finding classroom teachers has led some school boards to hire non-certificated classroom teachers (probably most of these are experienced in commercial driver education). A few school boards have contracted out both the classroom and in-car teaching to commercial driving schools. In one case of contracted classroom teaching, our findings suggest that student satisfaction is no higher in this board than in boards where classroom teachers are paid directly by the board.

3.4 The Teachers'Manual, while reasonably complete, has specific defects in organization, content, and clarity. Judging by its language, it is obviously not addressed to all current in-car instructors, some of whom (employees of contracted commercial driving schools) have only a minimal command of English. The Teachers'Manual is ignored by some contracted commercial driving schools.

3.5 Of 61 school boards responding to our questionnaire, 41 had nominally assigned curriculum administration to one person.* The actual amount of coordinative and other duties carried out by the assigned person, however, varied greatly among boards and in some cases was very difficult to establish; in some cases it was minimal. Eighteen (18) boards had decentralized curriculum administration in individual schools or groups of schools, or had no provision for curriculum administration. Two (2) boards had turned over curriculum administration to a commercial driving school along with classroom and in-car instruction. The last-mentioned strategy raises the question of whether a school board can legitimately or even legally assign responsibility for administration, supervision, inspection etc., to the contractor while still offering the course under the board's name and accepting fees for the course.

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* 65 school boards responded to this questionnaire but only 61 answered this question.

3.6 We assigned a composite score to each responding board representing the degree of centralized coordination of driver education in that board. The score was on a scale of 0 to 8. Boards having an annual driver education enrolment of less than 500 had very low scores on this scale, as might be expected (these were small boards with few schools, and few board-level coordinators). We studied the scores of boards having enrolments greater than 500. Of these boards, all but one of the 24 boards having coordination scores of 4 or less, had enrolments less than 1500. This indicated that with few exceptions, boards with smaller program sizes were less centrally coordinated and boards with larger program sizes were more centrally coordinated--according to information provided by their own coordinators. However, among a dozen boards of enrolments 1500 or greater that we subsequently studied in detail, the actual amount of centralized curriculum coordination activity that went on in some boards was minimal.

3.7 For classroom instruction, 48 of 62 responding boards employed their own teachers either largely or exclusively. Five boards employed both their own teachers and teachers who also worked in commercial driver education (some of these did not have Ontario teaching certificates); 3 boards used only teachers employed by contracted driving schools; and 4 boards used a mixture of high school teachers from other boards, elementary teachers, non-certificated teachers, etc.

3.8 In the larger board programs, relatively few high school teachers taught in-car. In-car was taught in large boards either primarily or exclusively (depending on board) by board-employed in-car instructors or by contracted driving school instructors.

3.9 Of 65 responding boards, 35 contracted with commercial schools for in-car instruction. All boards having annual driver education enrolments of 2000 or over contracted for their in-car instruction. Of the 35 boards that contracted, 18 called for tenders on the in-car contract; the remaining 17

did not call for tenders, probably in most cases because there was only one driving school in the vicinity that was large enough to handle the job.

3.10 In selecting the winning tender, responses from 23 respondents indicated the cost was the most important factor in making the decision, with previous satisfaction second in importance among these respondents. A commercial driving school's largest expense in carrying out a school board contract is salaries for instructors. In areas where numerous driving schools compete for a contract--i.e., in metropolitan areas mostly--there is pressure to bid low and provide cut-rate instruction by hiring instructors at low pay. Among these low-paid instructors are individuals who know little about teaching, communicate poorly, or cut corners on instructional time given to students--an easy matter, given docile students and no work supervision on the road. Instances of these deficiencies and others were provided to us by program graduates.

3.11 Five boards used neither high school teachers nor contracted driving school instructors for in-car instruction. These boards employed directly their own in-car instructors--hourly paid (many of whom probably also did non-high school in-car instruction as well, either on their own or for a driving school) or monthly salaried. None of the 4 boards that employed monthly paid in-car instructors did any contracting to commercial driving schools, which suggests that they had adopted a definite policy in this matter. These boards seem to have found an alternative to contracting their in-car instruction requirements to commercial driving schools.

3.12 Quality ratings of in-car instruction by board-level driver education administrators and by driver education classroom teachers, in a sample of 12 boards, showed the following results. Board-employed in-car instructors generally were given average to high ratings. In-car instructors employed by contracted commercial driving schools were given average to high ratings by the board administrators, but among the classroom teachers, about 14% of the responding teachers gave low ratings to such instructors. Most of this 14% was in one or two particular boards. From other evidence, we had surmised that in these two boards the administrators were poorly informed or ambiguous about the quality of in-car instruction in their boards, and their ratings seemed to bear this out.

3.13 Fifty-seven (57) boards responded to our request to indicate their intended maximum class size. Expected class sizes ranged from 20-24 students (these were mostly in small schools) to 40-42 students, with the most common estimate (20 boards) being 30-34 students. Since MTC suggests class sizes of 24 students, and the Ministry of Education (which provides grants to support the classroom part of the program) requires a minimum class size of 25, some explanation for these much larger expected class sizes is called for. Whether they are due to a shortage of teachers or amount to a way for the board to save money, class sizes larger than about 30 students are likely to make the teaching of driver education less attractive and therefore exacerbate the shortage of teachers willing to participate in the program.

3.14 The idea that one of the purposes of classroom instruction is to prepare the student for in-car driving instruction, with specific reference to classroom teaching of driving tasks, is one that did not elicit agreement from all of the 52 classroom teachers, 3 school supervisors and 11 area supervisors who responded to the appropriate questionnaires. Ten of these respondents--about 15%--expressed their conviction that driving tasks (such as stopping at intersection, turns, etc.) should be taught in the car only--with the implication that classroom instruction was of no value for teaching such driving tasks. This leads to the implication that at least these ten respondents-- and possibly others as well, did not and would not teach driving tasks in class.

3.15 Sixty-three (63) out of 65 respondents (classroom teachers, supervisors and area supervisors) rated the teaching of good driving attitudes as "very important" (the remaining 2 did not respond). Fourteen (14) out of 16 responding supervisors said that they advised their teachers to develop safe-driving attitudes in their students--only one answered no. Seven (7) assented to the question, did they advise teachers on methods for attitude teaching; 6 dissented. The methods that were in use for developing safe-driving attitudes, in decreasing order of frequency of response, were:

- discussing accident statistics
- discussing events that happened during in-car instruction of students present in class
- lecturing: suggestive, indirect approach
- lecturing: laying down rules--direct approach
- class discussion around a specific issue
- displaying and discussing local accident scenes
- discussing case studies
- teacher correction or feedback to individual students
- discussing events that happened during in-car instruction of students of other classes
- class exercises designed to develop specific values (values clarification approach)
- having students collect news of local accidents

(2 other methods were checked by only 10 or fewer respondents).

Only 10 respondents checked "forming small groups to discuss the life attitudes of the individual members--group therapy approach." This is not surprising since such a method requires special skill. However, this method is recommended for problem students by highly regarded authorities. It will be suggested below that more attention be given to this approach.

3.16 Some boards are submitting lists of names of students who have "completed the program" that are actually lists of students who enrolled in the program. Such lists would not be accurate lists of completions but would include failures, postponements, and dropouts. MTC is being misinformed in this way by these boards officials. However, Ministry sources state that, in the majority of cases, schools later inform MTC about this. The reason given by the driver education coordinator in one of these boards was that it speeded up the process of getting the graduation certificates from MTC and thus avoided student complaints. There is a great deal of pressure from students to get their certificates immediately.

3.17 Two hundred and sixty-two (262) program graduates in 11 boards responded to the Graduates' Questionnaire. Response rates within boards generally varied from 62% to 79% except for one board in which, because the program was not finished in 3 schools (the board's coordinator was not aware of this) only 36% returns were received. In response to one of the questions, 47 graduates (18% of respondents) calculated that they were given less than the officially required 6 hours of driving behind the wheel (some of these graduates were in boards that required 8 hours) and 20 of these (7.6%) received less than 5 hours. Eleven (11) of the respondents who received less than 5 hours were from two (only) of the 11 sampled boards; they made up 13% of the respondents from these two boards. One of these two boards stipulated that 8 hours be given (rather than 6 hours); yet some students in that board indicated getting as little as 4 hours. Reasons stated for these cases of short time behind the wheel included not only excessive demonstration and talk by the instructor, but clearly unjustifiable reasons such as instructor lateness, early endings of lessons, cancellations not made up later, and coffee breaks by instructors. Only 3 of 27 students complained, who clearly had reasons to do so. We may suppose from these findings that (1) short time is not uncommon, at least in some boards; (2) students seldom complain, for whatever reason--we have been told that some are threatened with failure by the in-car instructor if they complain. One student who did complain to his classroom teacher told us that the teacher said that in-car instruction was no business of the teacher's.

3.18 Eighty-one percent (81%) of the respondents had their driver's licence. Sixty-three percent (63%) received their licence after finishing the course, 14% during the course. Only 5% (13 individuals) had entered the course in possession of a driver's licence.

3.19 New drivers are at highest risk in the period that immediately follows licencing. Other things being equal, the more driving, the higher the risk. Twenty-two percent (22%) of the respondents said they drove for about 2 hours in the previous week; 14% drove for about 1 hour, 14% for about 3 hours, and progressively fewer for larger numbers of hours. Only 3% of the graduates drove for more than 10 hours in the previous week. 19% did not drive at all during the previous week. The most frequent locations of their driving were streets with light traffic, streets with heavy traffic, and highways with little traffic.

3.20 A majority (55% of the respondents) considered themselves as not skillful in driving before they got their learners' permit; but 44% did consider themselves able to drive, either skillfully or not very skillfully. Such a large minority of students who think they already know something about driving is bound to create problems for teaching. Moreover, 59% of the respondents indicated that they were able to operate an automobile before they began the course. Ninety-nine percent (99%) said they could ride a bicycle.

3.21 The reasons for enrolling, that were most frequently rated "very important," were, in decreasing order of frequency:

I wanted to learn to drive safely	(74%)
I wanted to prepare for the driver's test	(70%)
It will mean lower insurance rates	(65%)

The last-mentioned reason is subject to change, depending on possible changes in reduced insurance rates for driver education graduates; consequently this reason is very important to consider when planning for the future of the program.

3.22 Contrary to the instruction given in the Teachers' Manual, relatively few graduates were given more than half of their driving time in their first lesson in an off-street area, and only 2.4% did their whole first lesson off-street. We judged that not one of 7 boards on which we got sufficient graduates' data put much importance on spending at least half of the first driving lesson in the parking lot. In spite of well-developed systems in print for time-efficient development of driving skills using ordinary parking lots with pavement markings for elementary skill development (see e.g., Anderson, 1976), there is little evidence that driving instructors in Ontario are aware of or use these systems. This stands in contrast to documented observations made of driving instruction carried out in school parking lots in P.E.I.

3.23 Ratings by graduates showed several areas of general satisfaction (value of classroom subject matter, films, value of classroom in helping to become a safe driver, learning through in-car observation of other's mistakes, respect for in-car instructor, learning in-car, and confidence behind the wheel at end of course). But there were two major problem areas: the number of respondents who felt they knew enough already at the beginning of the classroom part, and too few effective learning activities in the classroom.

3.24 Statistically significant sex differences were found on 3 questionnaire items: two in-car items and one classroom item. The in-car items were (1) nervousness experienced by the respondent behind the wheel, and (2) ability to understand the instructor's directions. The classroom item had to do with the extent to which the respondent felt that he/she knew enough already, at the beginning of the course, about most of the classroom topics. Fuller details appear on page 155 of the complete report.

3.25 Severely critical responses were made to several aspects of the classroom part, including a 41% response indicating that the classroom was "boring" (40% considered it "interesting"), a 21% response that the classroom teaching was "fair", and a 17% response that the classroom teaching was "poor". For a more complete summary of attitudes to the classroom part, please see p. 161.

3.26 Attitudes to in-car part: Six or 8 hours behind the wheel was considered too little by a small majority of respondents; 12 or 16 hours of observation was perceived as too much by a considerable minority; 38-40% felt that not enough off-street practice and not enough demonstration had been given; 23% felt that they had not done enough practice repetitions of skills. For a complete summary, please see pp. 172-173 of the complete report.

3.27 Little belief was evident among the graduates that the classroom part gave them a good preparation for the in-car part.

4. DISCUSSION

4.1 The Minister's memo and the existing state of affairs

While there are some high schools in which the principal takes an active interest in driver education and the classroom teachers do what they can to "ensure the quality and coordination of the in-class and in-car phases of the course", as the Minister's memo of November 5, 1980 requires, these are probably in the minority. The assignment of responsibility as stated in the memo is probably not the best approach, in the light of the existing facts that we have determined. These facts are that many driver education classroom teachers have never taught in-car, and therefore would not be credible monitors of the quality of in-car instruction. A number of classroom teachers have been given letters of permission to teach driver education by M. of Ed. or by their local board without having taken the qualifying course; these teachers would be even less credible in the role of monitors of in-car instruction. Finally, some boards have appointed coordinators or supervisors who are paid to spend considerable portions of their time (a few full-time) in supervising driver education. These would be better choices for the task of ensuring in-class and in-car quality.

4.2 The task of supervising driver education instruction

Driver education is or should be a subject requiring a high and complex level of skilled teaching. Such skill and complexity are demanded if driver education is to be (a) cost-efficient and (b) effective in developing safe-driving skills and attitudes. Cost-efficiency in driver education centres mainly on the in-car portion, which is costly per student-hour of instruction because it can be given only to small groups. (Simulators and range training involve heavy capital costs and in any case cannot totally substitute for in-car instruction). To maximize the cost-efficiency of in-car instruction, two things are needed:

(1) pre-training of students in the classroom part, to prepare them as fully as possible for the in-car part (to facilitate learning behind the wheel and get maximum benefit from the costly hours in car);
(2) highly skilled in-car teaching.

By "highly skilled in-car teaching" we refer to the following demands made on the skilled in-car instructor, among other demands:

- close and continuous (i.e., incessant) observation of the student (the instructor must observe the student's eye, head, hand and foot movements, while simultaneously remaining aware of the location and motion of the car, the surroundings, and other road users)
- individualization of instruction (this requires close record-keeping, evaluation and individualized planning for each individual student, both between lessons and during the lesson itself--all within tight in-car time constraints)
- implementation of a full program of observation and evaluation tasks for the students who are observing from the back seat.

These tasks, which are among the most difficult ones that the in-car instructor must carry out, should make it clear that a high level of skill and judgement are required for cost-efficient in-car instruction. It should be obvious, then, that the person who supervises such cost-efficient in-car instructors (who is "responsible for the quality . . . of the . . . in-car phase") must be equally skilled and much more experienced. This is not a job for a typical driver education classroom teacher who has recently taken the qualifying course and has no in-car experience. The job of supervising in-car instructors should be done by a supervisor who is a full-time driver educator. There should be one or more supervisors in each large school board.

The tasks of the classroom teacher should include, among other tasks, (1) maximally effective preparation of students for in-car instruction, and (2) effective development of safe driving attitudes in each student. Task (1), preparation for in-car, requires much more imaginative teaching than we have found common so far. There are numerous ways of preparing the student, through classroom experiences, to learn what must be learned in the car with maximum time efficiency. These include: (1) preparatory reading assignments (2) preparatory activity assignments, such as making a model of the car's dashboard,* traffic board assignments, and traffic observation assignments; (3) classroom experiences, such as activities involving a simple steering wheel/accelerator/brake pedal simulation, a steerable toy car, a miniature drivable car in the school parking lot, and other simulations designed for learning the basic rules through activity.

Some students may be at an intellectual level that is not benefited by simulation, i.e., their learning is not facilitated by such preparatory exercises. These students may be able to learn only by visual and hands-on contact with the real thing. In such cases the students should be taken to the car and taught the location and operation of instruments, gauges, controls, and safety devices to the point of mastery in the motionless car. Each student should be given sufficient practice on each locating, operating and controlling task so that criterion performance is attained before costly, 3-student in-car instruction begins. Such exercises in the motionless car can be carried out in groups up to 12, by the classroom teacher or (more economically) by in-car instructors trained by the teacher. Driving demonstrations can be given to an entire class in the parking lot, with a skilled driver as demonstrator and the teacher as commentator and teacher. By arranging for these exercises and demonstrations to be given to groups of 12 to 24 instead of groups of 3, valuable in-car time could be saved and used instead to augment the actual driving time so much needed by beginning

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* They should also make a drawing of the dashboard of their family car (including, of course, all switches and controls).

students. In general, much more should be done than is presently done by most classroom teachers, to prepare the students for actual driving.

Task (2), development of safe-driving attitudes, has been dealt with in print, for example in the Automotive Safety Foundation's Resource Curriculum in Driver and Traffic Safety Education (1968). Changing attitudes of young drivers was the subject of an address by Mann (1977). An important aspect of attitude development relates to working with students who appear to be very high-risk drivers (judging from their in-car performance, or from their previous driving record.)

Why should school boards take the time and trouble to work with students who appear to be very high-risk drivers? Why should such students be given extra time and perhaps the attention of specialists? There are two answers. First, the precedent is already well established that the school should assist in the student's emotional development. The second reason has to do with driver education and highway statistics. Young male drivers, as a group, have higher accident rates than drivers over 25. Driver Education programs (combined with reduced insurance rates for D.E. graduates) may have the effect of putting more young male drivers on the road than there would be if there were no Driver Education. This means that Driver Education programs, whatever their positive effects on accident rates may be, are likely to have also a negative statistical effect that is purely related to age and sex. This statistical problem is now under intensive study by more than one agency in the U.S.

If Driver Education is to reduce accidents, then, it must have an educative effect that will overcome the age effect. Whatever it is about young drivers that leads them, on the

average, to collide more frequently, Driver Education has the task of completely counteracting that characteristic. This is a task of unknown dimensions, but it is clear that those involved in Driver Education have an awesome responsibility.

A reasonable first step in this task for driver educators--and for school boards that offer and administer these programs--is to do what they can with the very high-risk drivers that have been identified within driver education classes. Mann (1977) offers a number of techniques that should be well within the competence of school board psychologists and within the competence of interested and motivated high school teachers who have been prepared for the task by a psychologist. Doubts will surely arise about getting into group-therapy styles of attitude change; but those responsible for putting large numbers of young male drivers on the road should interest themselves in early identification and remediation of very high-risk drivers even though the most effective methods to be used for attitude development may be non-traditional.

It is only after the tasks that make up the job of the in-car instructor, and the tasks that make up the job of the classroom teacher, have been thus studied and implemented so that the driver education program can become cost-efficient and maximally effective, that the role of the <u>supervisor</u> of driver education instruction can be defined. The difficulty and complexity of the classroom teacher's and in-car instructor's job makes it evident that every school board that employs more than a few teachers and instructors needs a well-qualified, highly experienced program supervisor, part- or full-time depending on the size of the board's program. We know of a few boards that presently have such supervisors (some are called program heads, coordinators, or administrators). It is impossible to imagine how a program that trains (say) 500 or more students per year, can do so efficiently and effectively without a qualified and experienced supervisor.

4.3 Some comments on classroom teaching

Responses by program graduates indicated a paucity of effective classroom learning experiences. There was a large percentage of low ratings of the quality of instruction. Forty-one percent (41%) of the graduates responding judged the classroom part "boring." This word is so commonly applied to the classroom part by driver education students that we noticed that teachers we spoke to could guess when we were going to use it.

A number of factors underlie these inadequacies and weaknesses in classroom instruction, some of which could be corrected by policy revision or administrative action. Class sizes may be too large, classroom periods too long, teacher pay rates too low. Even if these faults were corrected (and they should be), classroom instruction is not likely to "take off" until a coordinator with both experience and leadership qualities is appointed and begins to work with teachers and committees of teachers to develop classroom curriculum (by this term we mean the creative work that must be done to bring an "official" curriculum to dynamic life in the classroom). The coordinator's work might be done informally, or it might involve board-wide curriculum committees--depending on the local situation and the coordinator's personal style. The personal factor is crucial. Teaching cannot be made vital and students cannot be inspired to study, learn and change, through centralized action alone. As long as driver education is taught in high schools by high school teachers, excellence in driver education will depend on the same basic factors that excellence in any other high school subject depends on: dynamic teaching, interesting classroom experiences, and motivated students. An essential factor in developing excellence on a board-wide scale, according to our observations, is the active presence of a qualified, experienced, and dynamic coordinator.

4.4 Some comments on in-car instruction

If the foregoing remarks are valid with respect to the development of a successful program at the board level, the practice of contracting in-car instruction out to commercial operations whose instructor employees may come and go--who tend to be regarded as interchangeable units rather than teachers--looks strange in an educational context. It seems certain that if a school board (and this refers to the school board trustees and their chairman) insists on cost as the sole determinant of who will teach the students in-car, excellence will become a matter of sheer luck rather than something that can be planned for. Some boards have come to realize, or have been made to realize through parents' demands for a better program, that cost-determined contracting for in-car instruction is a downhill road. They have been persuaded to turn instead to the acquisition of in-car instructors as part-time or full-time board employees. Many of the in-car instructors who are hired by most boards, however, are not academically qualified and highly trained (in comparison, for example with 2-year driver education training programs in some U.S. colleges). An active coordinator and an on-the job training program for instructors would be essential to attain the kind of in-car instruction outlined above. We cite the example of the London, Ontario, program as one worth studying.

The foregoing remarks have been addressed toward a tested and proven solution to in-car instruction for the long term. But immediate action is needed to bring to an end the occurrences of inadequate-to-unacceptable program delivery that can be recognized in the responses we received from program graduates. The Ministry of Transportation and Communications is presently proposing a bill which will give MTC the authority to regulate commercial driving schools in Ontario.

4.5 Some comments on the supply of qualified classroom teachers

We have outlined the problem of the "shortage" of qualified classroom teachers (in some boards) and have traced it to four causes: undesirable working conditions, insufficiently attractive pay, lack of easily accessible training courses, and lack of "teacher qualifications credit" for the driver education qualifying course. We have highlighted the fact that there are numerous certificated teachers teaching the classroom part without having taken the qualifying course, and the fact that there are some instructors teaching the classroom part without an Ontario teaching certificate. We have noted that courses are not being offered in centres where they were needed in order that unqualified classroom teachers may become qualified.

The simple solution would be to tell the Ministry of Education to offer courses in places such as the Ottawa area where there are teachers teaching driver education who have not taken the MTC/MOE training course. It might be appropriate, and it certainly would be enlightening, for the Ministry of Education to issue a statement explaining why the teachers and the needed courses have not been brought together, and stating what the Ministry's intentions are with respect to ensuring an adequate supply of qualified driver education teachers.

4.6 The insurance premium reduction for driver education

The Insurers Advisory Organization of Canada recently announced the reductions currently in effect for drivers who have completed driver education may be withdrawn. The reason given was that insurance claims for drivers with driver education do not differ from those without driver education (Globe and Mail, July 18, 1981).

For our sample of 262 driver education graduates in 11 school boards, the insurance reduction was a reason for taking the course that was third most frequently ranked as "very important." There can be little doubt that if the reduction is withdrawn, enrolments will drop--by how much, it is at present impossible to predict.

A discussion held with a group of driver education classroom teachers in one large urban school board led to widespread agreement that elimination of the insurance reduction would improve the quality of the students who enrol in the course, because those who were "in it just for the reduction" would no longer enrol. These teachers envisaged smaller classes, students with better motivation to learn, and less pressure on the teacher to struggle with minimal tasks such as maintaining quiet.

The matter may not be that simple, however. The non-enrollment of poorly motivated students would put them out of reach of the help that the course offers. The drive toward economy by school boards will not be counteracted by reduced enrollments. And if one of the reasons for classroom control problems is student boredom, it will take more than smaller classes and better students to revivify the driver education classroom.

4.7 Driver education and new-driver accident rates

We found that 31 of 65 responding boards of education refused some of the qualified students who wanted to enrol in the board's driver education course. (The main reasons were insufficient classroom teachers or in-car instructors, or insufficient cars). In such cases, the board usually gave low priority to applicants who already had their driver's licence. Yet, newly licensed drivers deserve consideration. In the critical post-licence period, the new driver is no longer accompanied by a licensed driver or an instructor. The typical young driver is forming habits and developing confidence in his or her driving, whether such confidence is justified or not. Accident and death statistics suggest that young, recently licensed drivers as a group are at a dangerous period in their driving career. It seems likely that a valuable opportunity is being missed when newly licensed students get no further training either because the local course is filled to capacity or because the regular high school course does not appeal to them as licensed drivers.

Some observers have advocated the replacement of the current pre-licence course with a post-licence course. However, both courses could reasonably exist in the same school board.

What would the students in a post-licence course be like? If all the students were newly licensed they would be a somewhat more uniform group (incompetent drivers would have been weeded out). All would be in their (newly introduced) probationary period, except for a few who had had their licence for some time. Perhaps the most important difference would be a difference in purpose. The purpose of the course--and hopefully the purpose of the students--would be to turn out better and safer drivers--not to prepare for the licence test.

5. CONCLUSIONS

The Ministry of Transportation and Communications should give consideration to the following steps.

1. Those responsible for the program should seek reliable means for identifying very high-risk drivers among the graduates of the program, and should look into ways of either helping them to become safer drivers or persuading them to postpone their licence test -- or both.

With regard to the last-mentioned alternative, it might be objected that there is no legal way of preventing an individual from taking a licence test. The intent of the suggestion, however is to convince very high-risk drivers, in the light of the factual evidence of their own dangerous behaviour behind the wheel, that it is to their own benefit and their own safety to postpone the licence test until they have had, at the very least, more driving experience under skilled guidance; moreover, that they may need some help with their attitudes.

Therefore the Ministry should investigate and identify quality examples of what is currently being done in this area by high school driver educators both within the Ontario program and in other programs in Canada and elsewhere; should identify promising methods for identifying driver education students who are at risk and gaining their interest; and should seek methods within the Ontario high school program that would go beyond merely persuading the very high-risk individual to delay licensing and move toward remediation for very high-risk drivers.

The Ministry, school boards, and suitable qualified driver education classroom teachers or other board employees such as psychologists, should be given legislative authority if necessary to identify very high-risk student drivers and to recommend and offer remedial treatment under professional supervision.

2. The Ministry should consider the social benefits and advantages of creating a post-licence driver education program in those school boards that desire it.

3. The Ministry should identify ways of inspecting and improving commercial driving schools before a licence is granted or renewed. The case of driving schools which win contracts for in-car instruction in the high school program is a special one. The students are at an impressionable age; their habits and attitudes are still forming and flexible; they are often docile and easily put upon, especially by someone in authority such as a driving instructor. It is not surprising, given these facts, and the fact that in many school boards the lowest-tender driving school gains the contract for in-car instruction (with all that this signifies), that a number of students in a number of school boards were not given their full time behind the wheel, that certain other rightful benefits and experiences were not given them, and that some of the cars were not fit for in-car instruction. According to Ministry sources, MTC is presently proposing a bill designed to help eliminate such offences on the part of contracted driving schools. Taking all these facts into account, it is reasonable to suggest that driving schools that intend to provide in-car instruction within the high school program (whether under contract or by any other arrangement) be required to meet special standards. It is also reasonable to suggest that the Ministry take responsibility for setting these standards, for ascertaining whether these standards are met by every driving school that is hired or put under contract by an Ontario school board, and in the case of those driving schools that do not meet these standards, for preventing (by withholding a licence or any other suitable means) such driving schools from giving in-car instruction in the high school program until the standards have been met.

4. Some school boards have developed and implemented a simple method for establishing ongoing "paper control" of contracted driving schools. The method is to design reporting forms and to require the driving school to complete and return these forms regularly. The forms are made part of the tender form that is filled out and submitted by the driving school at the time of submitting tenders, and the tender form, including the reporting forms, becomes the contract. To the best of our knowledge, this method works, in the sense that the contractors do in fact complete and submit the forms regularly (driving lesson record forms, etc.).

In view of the fact that at least 35 public school boards contracted for in-car instruction in 1980-81, the Ministry should give consideration to designing a suitable tender document for boards to send out when calling for tenders for in-car instruction. The tender document would contain carefully designed forms as follows: student attendance and in-car record (with instructions and directions to in-car instructors); description of vehicles to be used; insurance coverage; individual student's schedule for in-car; number of qualified instructors on staff; specifications for vehicles; and other forms to be completed as part of the tender. Examples include forms developed by the Niagara South Board of Education, the Carleton County Board of Education, and others. Alternative to designing standard forms, the Ministry might provide a service by drawing up a list of boards that would be willing to exchange information and examples.

5. An active, qualified, experienced and conscientious Driver Education Supervisor, assigned to the program either part time or full time, appears to be the key factor in a quality program at the school board level. The Ministry should make this desirable situation clear to school boards that do not yet have a Driver Education Supervisor. The Ministry should take action to identify suitable candidates and put them in touch with interested schools. The Ministry should also give consideration to arranging for specialized training for board-level supervisors/administrators who wish such training.

6. Among the strategies for obtaining quality in-car instruction that are available to a school board, we have identified two that were successful in certain boards, and verified the success of each. One strategy is to call for tenders and choose the winning tender on the basis of reputation for quality and reliability. The other strategy is to hire in-car instructors onto the board staff and put them under the direction of a qualified driver education supervisor.

7. The Ministry should carefully consider the needs of small communities distant from commercial driving schools. These communities and schools may need assistance with training and staffing their in-car program. How these needs could be met with help from the Ministry needs active attention.

8. The Ministry should impress upon the Ministry of Education which funds the classroom portion of the program, the need to increase driver education grants to boards, at least by a percentage that will remediate the effects of inflation, and with additional funds sufficient to implement such plans for upgrading their program as have been suggested above.

9. The Ministry should impress upon the Ministry of Education the need for training courses for classroom teachers in areas such as Ottawa where there are numerous driver education teachers who have not received the necessary training course.

10. Although boards of education are required to submit a form declaring numbers of students who completed the driver education course, and names and qualifications of classroom teachers and in-car instructors, some boards are not doing so, or are submitting these annual lists so late that they are of little use for statistical purposes and of no use for checking on qualifications. The root of the problem seems to be that MTC has no financial clout since it is the Ministry of Education that funds the program. It might be more effective in producing the needed annual information for these delinquent boards, if the completed forms had to be sent by the board to the Ministry of Education and not to MTC.

11. Boards should not be allowed to submit to the Ministry (MTC) lists of student names for graduation certificates until they are certain which students are actually going to graduate.

12. We found that even in the school board in which, among the sample of school boards we studied, program graduates' ratings of instructional quality were most severely critical, there was considerable interest among a group of classroom teachers in the possibility of improving their teaching. At the moment, in that board, there is no one to whom these teachers could turn, to help them revivify their teaching and implement their curriculum more effectively. There is clearly a need for an experienced and enthusiastic consultant to visit and "animate" groups of teachers such as this one. The Ministry should look into this need and how it might be met.

5. IMPLICATIONS FOR FURTHER RESEARCH

As an evaluation study of high school driver education in Ontario, the foregoing study is limited in the following ways.

1. Except for one general questionnaire, the study was limited to a sample of 12 school boards out of 77 in Ontario.

2. In-car instructors were not surveyed (although in three boards meetings were held with them to discuss issues).

3. Teachers' attitudes to their work and working conditions, their teaching methods, and their suggestions for course improvement and for handling typical problems in the course, were not surveyed.

In the light of Limitation 1, the present study should be considered a preliminary, sample study, in preparation for an extensive, representative study across the province. This in fact was the intent and the study was funded on that basis.

The findings of the present study need to be augmented by the more representative study that was conceived. This second part should address the following questions, among other questions that have been raised but not fully answered in the present study:

1. What further examples of excellent school board programs can be found?

2. To what extent are the strengths and weaknesses identified in the present study, common to Ontario generally?

3. What additional features of driver education in Ontario exist and need to be described? For example, are there other ways in which school boards have handled problems of staffing in-car instruction, getting classroom teachers, supervising the program?

4. What do in-car instructors, of different categories (board-employed, part-time/full-time, contracted employees) have to say about the questions we have raised? How do they organize

and carry out their work? How do they work with and relate to the classroom part?

5. What can classroom teachers tell us about their work, the demands of their work and how they handle them, and their ideas for course improvement?

6. What can be done, and what is being done, about the problem of putting more high-risk drivers on the road?

We recommend and propose that such a complementary study be designed, funded and carried out as quickly as possible, so that the Ministry will be informed on these questions in preparation for the planned introduction of a new curriculum.

REFERENCES

Anderson, W. G. In-Car Instruction: Methods and Content, 2nd ed. Addison-Wesley, 1977.

ASF (Automotive Safety Foundation). Resource Curriculum in Driver and Traffic Safety Education. Washington, D.C.: ASF, 1968.

Kenzie, R. "Evaluation of the Driver Education Program in the High Schools of Prince Edward Island". Educational Evaluation Centre, OISE, 1978.

Kenzie, R. "Qualitative Evaluation", E+M Newsletter, No.33, February, 1980. Educational Evaluation Centre, OISE.

Mann, W. A. "We Can Change Attitudes". Paper presented to the Second National Symposium on Driver Education, Toronto, 1977.

Ministry of Education, Ontario. Resource Guide for Driver Education. 1977.

Ministry of Transportation and Communications, Ontario. Power Under Control. McClelland and Stewart, 1972.

Ministry of Transportation and Communications, Ontario. Teachers' Manual for the Driver Instruction Program. Undated.

Morgan, H. J. "Classroom Innovations--Some Novel Ideas". Paper presented to the Second National Symposium on Driver Education, Toronto, 1977.

Select Committee on Highway Safety. Final Report. Legislative Assembly of Ontario, 1977.